

1117-14-340

Man Wai Cheung, Lorenzo Fantini, Jennifer Park* (jmypark@umich.edu) and **Martin Ulirsch**. *Faithful realizability of tropical curves*.

Every algebraic curve over a nontrivially valued field has a corresponding tropical curve via tropicalization, where tropical curves are defined as balanced weighted 1-dimensional rational polyhedral complexes. It is then natural to ask whether tropical curves can be realized as the tropicalization of a smooth, complete and connected algebraic curve. Further, we ask whether the tropicalization can be faithful. In this talk, I will answer the above question of faithful realizability for a large class of tropical curves. This work is joint with Man Wai Cheung, Lorenzo Fantini and Martin Ulirsch. (Received January 17, 2016)